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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,128	11/25/2003	Wolfgang John	60148.0006US01	9441
7590	11/18/2004		EXAMINER	
Roger T. Frost, Esq. Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903				HARRIS, ANTON B
		ART UNIT	PAPER NUMBER	2831

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/723,128	JOHN, WOLFGANG
	Examiner Anton B Harris	Art Unit 2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 25 November 2003.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-6 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. 10/723,128.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claim 4, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang (6,372,992 B1).

Regarding claim 1, Yang (col. 6, lines 1-67) discloses a flat flex cable, or FFC, wherein said cable 10 contains at least two electric conductors 12, 14 that are embedded in at least one insulating layer 16 of a plastic material, characterized by the fact that a circuit layout 50 is applied on the surface of the flat flex cable 10 and connected to at least one conductor 12, 14 of the cable 10, and by the fact that at least one electric and/or electronic component (not shown) is arranged on the circuit layout 50.

Regarding claim 2, Yang (col. 6, lines 1-67) discloses that the circuit layout 50 consists of a copper foil (col. 7, lines 58-62) with low transverse strength (col. 2, lines 57-59).

Regarding claim 3, Yang (col. 6, lines 1-67) discloses that the electronic components (not shown) are connected to the circuit layout 50 by means of conductive bonding (col. 7, lines 23-40).

Regarding claim 4, Yang (col. 6, lines 1-67) discloses that the electronic components (not shown) are covered with housing shells or by means of selective casting or a protective lacquer (col. 8, lines 60-67) consisting of a hardenable polymer system.

Regarding claim 5, Yang (col. 6, lines 1-67) discloses that the copper foil (col. 7, lines 58-62) has a so-called cauliflower structure and/or is provided with a black oxide coating on the side that faces the flat flex cable 10.

Regarding claim 6, Yang (col. 6, lines 1-67) discloses that the electrically conductive connection between the circuit layout 50 and the at least one strip conductor 12, 14 of the flat conductor 10 is produced by means of resistance welding (col. 8, lines 40-43).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schilson U.S. Patent No. 6,222,131 B1 discloses a flat cable including plastic material and copper.

Wakamatsu U.S. Patent No. 5,780,773 discloses a flat cable including plastic material, two electric conductors embedded in an insulating layer, and copper.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anton B Harris whose telephone number is (571) 272-1976. The examiner can normally be reached on weekdays from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dean Reichard, can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

abh

11/15/04

*Dean A. Reichard* 11/15/04  
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